EQAO Math Review Sheet
Things to Know (Organized by Strand)

Note: Beside each point in red, is a page or chapter from the Nelson textbook that can help you practice

Number Sense and Numeration:

- Place value (review the place value chart, from 1,000,000 – 0.001) page 41
- Writing numbers in standard, written and expanded form page 41
- Rounding whole or decimal numbers to estimate page 55
- Division and multiplication of whole and decimal numbers (using a variety of strategies) chapter 6, 9 and 10
- Fractions: finding an equivalent fraction; ordering fractions on a number line (0-1, for example) pages 357-360
- Converting between fractions, decimals, percent and ratio page 369
- Order of operations (BEDMAS; or PEDMAS) see class notes
- Find the unit rate (for example, if company A sells internet data usage at $3.00 for 60 minutes of use, what is the rate per minute?) pages 374-375
- Use ratio to describe the data in a set. (example, in a class of 24 students, there are 15 boys and 9 girls. The ratio is 15:24 (part to whole), or 15:9 (part to part) pages 364-365
- Identify a number as prime or composite. Pages 166-168
- Show a composite number as a product of prime numbers. Use a factor tree to show this. For example, 30=5x3x2 see class notes
- Identify multiples of a number (Example: the multiples of 4 are 8, 12, 16, 20, 24, etc.) Pages 170-171
- Identify the factors of a number (Example: the factors of 100 are 1, 2, 4, 5, 10, 20, 25, 50, 100) pages 166-168
- Use a number line to show the value of a number. Page 24
- Multiply by 10, 100, 1000, 10 000, 100 000, 0.1, 0.10, 0.100, etc. chapters 6, and 9
- Divide by 10, 100, 1000, 10 000, 100 000, 0.1, 0.10, 0.100, etc. chapters 6 and 10

Data Management and Probability:

- Calculate the mean, median and mode of a set of numbers. Pages 84-85
- Read and interpret the data on a graph. (on a variety of graphs: bar graph, pictograph, scatter plot, line graph, coordinate grid, broken line graph)
- Determine the theoretical probability of an event. Chapter 3

- Find the theoretical probability of an event out of 10, then relate that to a probability out of 100, or 500, etc. (for example, if an outcome has a 3/10 chance of happening (or 30%), it will have a 150/500 chance of happening (or 30%)) page 393
- Use a stem and leaf plot to record data. From Grade 5
- Plotting points on a coordinate grid (list x-coordinate before y-coordinate) pages 72-73
- Describe the probability of an event using a fraction, decimal or percent page 399
- Use specific probability language (not just likely or unlikely) see class notes
- Draw a bar graph, scatter plot, line graph, pictograph, broken line graph to represent data. Use the appropriate graph depending on the type of data.
- Use proper labels on a graph (graph title, y-axis title, x-axis title, intervals, scale, etc.) chapter 3
- Organize data into a tally chart with intervals. Page 93 #1

Patterning and Algebra:

- Use a table of values to determine a pattern rule. Page 10
- Use variables in an equation to determine an unknown value. (p x 3 = 24; what is the value of "p?") page 19 #3
- Continue, or extend a pattern. Chapter 1
- Extend a pattern using a pattern rule. Chapter 1
- Understand what "term" and "term number" mean in a pattern. Page 4
- Create a pattern rule using term and term number. Chapter 1
- Explicit pattern rule vs. recursive pattern rule. Page 9
- Use pictures (diagrams) to extend a pattern. (Especially a growing pattern using shapes or designs) chapter 1

Measurement:

- Find the area of rectangles, squares, triangles and parallelograms (use the proper formula). Pages 242-243 and class notes
- Use what you know about rectangles, squares, triangles and parallelograms to find the surface area of 3D polyhedrons. (find the area of each face, then add them all together) page 324
- Find the volume of 3D structures. (use the proper formulas) Determine the area of the base, and then multiply by the height or depth. Page326 and class notes
- Measure angles accurately using a protractor. Page 226

- Estimate and identify an angle as acute, obtuse, right, straight, reflex, etc. by using benchmarks of well-known angles (example 45º, 60º, 90º, 180º) page 226
- Determine the most appropriate unit of measurement to measure an object. Page 143
- Convert measurements (mm, cm, dm, m, dam, hm, km) or (g, kg, t) (mL to L) etc. page 145
- Convert m^2 to cm^2 (For example, 2m = 200cm; but $2m^2$ = 20,000cm^2 because 2m2=2m x 1m, which is equal to 200cm x 100cm) pages 240-241
- Measure a line segment accurately with a ruler. Chapter 5
- Measure an angle accurately with a protractor. Chapter 7
- Construct a shape accurately, using given measurements and a ruler/protractor. Label each part of the shape. Chapter 7
- Label the angles of a shape using capital letters. Class notes
- Label the sides of a shape using lower case letters. Class notes
- Opposite angles and sides are labeled with the same letter. Class notes

Geometry and Spatial Sense:

- How to find the area of a parallelogram (formula) page 248
- Transformations: Reflections, Translations, Rotations (flips, slides and turns) chapter 14
- Describe transformations by using words and degrees. (Example, translate shape 3 units to the right; rotate shape 90º clockwise from point "c") chapter 14
- 3-D and 2-D Drawings: Isometric, front view, side view, top view pages 334-345
- Accurately identify and describe 2-D and 3-D shapes using properties (# faces, edges, vertices, parallel sides, lines of symmetry, perpendicular lines, etc.) These include: rhombus, parallelogram, trapezoid, square, rectangle, triangle, cube, rectangular prism, triangle-based prism, pyramid, etc. chapter 7
- Definitions of (and how to label): parallel sides, perpendicular lines, lines of symmetry, diagonal, intersect) class notes, page 224 (diagonals)
- Draw the lines of symmetry on a shape. Page 222

Success Criteria for Multi-Step Problem Solving:
- Read the question twice, then summarize it in your own words without numbers. (This helps to understand what the problem is about)

- Use a W.I.K. and W.I.N.K chart (What I Know / What I Need to Find Out). Include all relevant math knowledge that will help you solve the problem (not just what's listed in the problem)
- Show all calculations, and number your steps in thinking.
- Always ask yourself: what does this number represent? (Helps to label this information in your calculations.)
- Always ask yourself: Does this make sense in real life?
- Answer the **question that is being asked**. (Use a concluding sentence)
- Use the math terminology that fits the problem.
- Check your work (means re-calculating to check your results).

Tips for Multiple Choice Questions:
- Cover the choices. Solve the problem before looking at them so they don't confuse you.
- Use a scrap piece of paper if necessary to do your calculations and problem solving first.
- Fill in the bubble sheet carefully and according to instructions.
- Read the whole question twice before solving (there may be more than one step, and if you miss a step, chances are, that answer will be one of the options!)

Last – Minute Tips and Information:
- Get plenty of rest the night before.
- Don't stress – this is your opportunity to show what you know and put your best math brain forward – BUT it will **NOT** affect you or your report card.
- Take your time – there is no prize for the person who finishes first.
- **Eat a nutritious breakfast**.
- Take a stretch break, drink water, have a snack – this is a long test. Give yourself a break if you need it.
- **Think things through** – you know this stuff. Don't let a serious and long test convince you otherwise.
- Use a calculator if necessary. It's allowed.
- In fact, use whatever **tools** that will help you solve each problem: counters, linking cubes, mirrors, dice, protractors, rulers, geo boards, fraction rods, pattern blocks, base ten blocks. We've used them all year, and they are permitted during the test so make use of them.
- **Be proud of yourself**. You've worked hard in math this year and it will show on this test!

Online Resources:

For Practice Tests and Answer Sheets:
http://www.eqao.com/Parents/Elementary/036/036.aspx?Lang=E&gr=036

Scroll down until you see tests for the last 10 years listed. (Student Assessment Booklets and Scoring Guides) Make sure you look at Junior Division tests, not Primary!